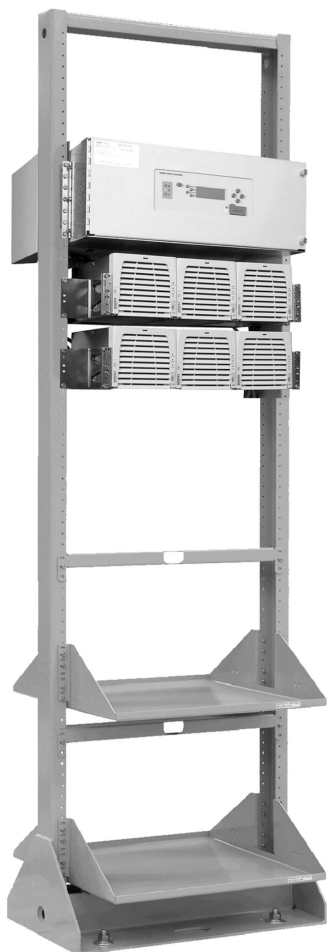


Infinity Frame Mounted System

FMS 4100 Series, H569-462
-48V Output, Maximum 800A, 1200A



Features

- High power density
- High efficiency
- Modular plug-and-play components
- Remote monitoring capability
- Universal ac input
- Seismic zone 4
- Low Voltage Load Disconnect and Low Voltage Battery Disconnect options
- A variety of dc distribution options available
- NP series or 596 series rectifier options
- System EMI FCC level B

Features

- Laptop tray
- External light
- Universal plinth
- Additional battery shelf with cables and disconnects

The Infinity Frame Mounted System (FMS) is an extremely flexible 23-inch rack-mount power system that supports two modular rectifier families. Modular system components address a wide range of power applications, and allow effective solutions to your system's current power requirements with low initial cost and managed future growth.

Infinity FMS power solutions are available up to 800A in a half-height framework, up to 1200A in a full-height framework, and up to 400A in a sub-rack system suitable for cabinet applications. The half-height option allows mounting on top of various batteries and or stands.

The Half-height system can be arranged for up to twelve NP series or eight 596 series rectifiers for redundant systems ranging from 15.6A to 800A. The full-height system holds up to twenty-four NP series and twelve 596 series rectifiers or it can also accommodate battery trays to meet battery reserve time as needed. The sub-rack system holds up to three NP series or four 596 rectifiers for redundant, extended temperature rated systems ranging from 15.6A to 400A.

A significant advantage of the FMS modular concept is the introduction of the new Dual Voltage plants. The Dual Voltage plant consists of +24V and -48V building blocks all in the same framework allowing powering of systems having dual voltage inputs.

System Features

Maximum Design Efficiency

The Infinity FMS has exceptional power density. Incremental, cost-effective system growth is made possible through convenient front-access design and lightweight modular components. In addition using a single set of components over a wide range of applications reduces training, parts inventory, and management. Moreover, many of the same components are used in the reliable Galaxy Power Systems.

Simplified Engineering

The Infinity FMS is designed to provide you with easy installation and minimal maintenance. Every building block within the Infinity range is designed to the highest quality and reliability standards. By adding remote monitoring and configuration management to your system, Infinity will provide you with fault indication and general performance data; valuable input to assist in reducing service intervals and when planning for future expansion.

Automated System Setup

For automated installation and set up, the controller and rectifiers communicate via a digital interface. A newly added rectifier automatically identifies itself to the controller by transmitting its type and serial number, and the controller then sets the output voltage to a pre-established value. The digital interface automates the installation and setup process and eliminates the need to use potentiometers to separately set the output voltage or balance current sharing.

Continuous Operation

The Infinity FMS is designed for continuous operation and in-service upgrades, allowing system components— including rectifiers, distribution, and controller options—to be added in the field without interrupting service.

Simplified Plant Management

The Infinity FMS system operates with the Galaxy Vector controller. The controller serves as the single interface point for rectifier control, alarm and status reporting, battery management and plant diagnostic.

Controller Options

The GALAXY VECTOR Controller is a powerful, space efficient, cost efficient, controller with many beneficial features, including:

- Four-by-twenty LCD for current, voltage, and plant status display
- Control for up to 24 rectifiers
- Automatic rectifier restart
- Reserve engine transfer sequencing
- Selective high-voltage shutdown
- Alarm monitoring of rectifiers and plan components
- Office alarm interface with six relay outputs
- Controls optional low-voltage battery or load disconnects
- Slope thermal mode control
- Recharge current limit
- Alarm test

Specifications

Input	NP800	NP1200	NP1500	NP2500	596D
Nominal Voltage (single phase)	100/120/200/208/220/240 Vac			200/208/220/240 Vac	208/220/240 Vac
Voltage Limit, Steady State	85 to 264 Vac			150 to 264 Vac	176 to 264 Vac
Frequency	47 to 63 Hz				
Max AC Input Current (per rectifier)	10A at 100 Vac	15A at 100 Vac	15A at 100 Vac	13A at 208 Vac	40A at 208 Vac

Output	NP800	NP1200	NP1500	NP2500	596D
Nominal Output	-48 Vdc				
Vo Setpoint (factory)	-52.0 Vdc ±1%				
Vo Range	-48.0 to -58 Vdc				
Regulation (with Galaxy Controller)	±2%			±0.5%	
Ripple (0 to 20 MHz)	250 mV p-p			200 mV p-p	
Output Current (maximum per rectifier)	15.6A	23A	29A (>150 Vac) 23A (<150 Vac)	50A (>170 Vac) 42A (<170 Vac)	110A

Physical

Height	Full-height frame: 84 in. (2134 mm) Half-height frame: 42 in. (1067 mm)
Width	26 in. (659 mm)
Depth	18 in. (459 mm)
Weight (approximate without rectifiers)	Full-height frame: 310 lb (141 kg) Half-height frame: 255 lb (116 kg)

Environmental

Operating Temperature Range	With 596D Rectifiers: -40 to 75 °C (-40 to 167 °F) With NP Rectifiers: -5 to 55 °C (23 to 131 °F)
Operating Relative Humidity	5% to 90% non-condensing
Storage Temperature Range	-40 to 75 °C (-40 to 167 °F)
Storage Relative Humidity	5% to 95% non-condensing
Audible Noise	<52 dBA (0 to 30 °C), <60 dBA (31 to 50 °C), based on single rectifier
EMC (up to 8 rectifiers)	FCC, EN 55022, CISPR22, Level B, conducted and radiated
Immunity	FCC and CISPR22 (EN55022) Class B

Safety / Standards Compliance

Safety Standards	UL1950, EN60950 (IEC950), CSA*234/950
Certification Marks	UL Recognized (Canada and U.S.), CE marking, NEBs Certification

System Capacities	NP800	NP1200	NP1500	NP2500	596D
Half-Height	187A 172A N+1	276A 253A N+1	348A 319A N+1	600A 550A N+1	800A 700A N+1
Full-Height	187A 172A N+1	276A 253A N+1	348A 319A N+1	600A 550A N+1	1200A 1100A N+1
Sub-Frame		253A N+1	319A N+1	550A N+1	1200A 1100A N+1

Ordering Information

System	Description	Comcode
	Half-height Frame	H569462G1
	Full-height Frame	H569462G2
	Sub-rack-system	H569462G9
	PXS shelf for 596X (FMS4XXX)	H569462G50
	Initial rectifier shelf for NP rectifiers	H569462G54
	Additional rectifier shelf for NP rectifiers	H569462G55
	PXS shelf for 596D (SRS4120)	H569462G58
	24 position DC distribution panel, with Vector controller and LVLD option. For 596D and NP rectifiers	H569462G60
	24 position DC distribution panel, with Vector controller and LVBD option. For 596 rectifiers	H569462G62
	24 position DC distribution panel, with Vector controller. For 596 rectifiers	H569462G63
	-48V 24 pos DC distribution panel with vector controller, no LVD	H569462G66
	+24V/-48V 24 position DC distribution panel for NP and 596 rectifiers (no controller and no LVD option)	H569462G70
	Battery tray for NSB110FT	H569462G46
	Battery tray for NSB170FT	H569462G47
	NP0800 Rectifier	108988837
	NP1200 Rectifier	108984519
	NP1500 Rectifier	108982711
	NP2500 Rectifier	108982455
	596A2 Rectifier	108796400
	596D Rectifier	108962895
FMS4110	H569462G1, G54, G55, G60	108987736
FMS4120	H569462G2, G54, G55, G60, G46-2	108991477
FMS4120	H569462G2, G60, G54, G55, G46-4	108992450
FMS4120	H569462G2, G60, G54, G55, G47-3	108992806
FMS4120	H569462G2, G54, G55, G46-2, G66	108993473
FMS4120	H569462G2, G54, G55, G60	108993663
FMS4130	H569462G2, G64, G51, G70, G60, G54, G46-2	108991386
FMS4130	H569462G2, G64, G51, G70, G60, G54, G47-2	108993903
SRS4110	H569462G9, G64, G60	108990982
SRS4120	H569462G9, G58, G60	108990561



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